

DIACHRONY FOR SYNCHRONY: A CASE FROM ENGLISH

GWANG-YOON GOH

The Ohio State University

This paper aims to provide a new perspective on the analysis of English *tough*-constructions by considering the insights from the diachrony and synchrony of prepositional stranding constructions in the history of English.

1. INTRODUCTION¹

English TC has caused considerable controversy about its correct analysis and this controversy can be roughly described by two main types of analyses. The first type, which can be called 'object-raising analysis' argues that the subject of the main clause in a *tough*-sentence is not the 'true' subject of the *tough*-adjective but it is generated as the object of a verb or preposition in the infinitival phrase or clause and moved to the subject position (Rosenbaum 1967, Postal 1971, Berman 1973, among others). This position is supported by the well-known fact that typical *tough*-adjectives such as *easy*, *hard*, and *difficult* have no or little semantic effect on their subjects.

On the other hand, the second type of analysis argues that *tough*-adjectives subcategorize for the infinitival phrase with a gap. Thus, Government-Binding (GB) theory, for example, Chomsky (1977: 102-110, 1981: 308-314), proposes the movement of an empty operator that binds the trace in the object position and is coindexed with the subject. Furthermore, although no movement of an empty operator is posited, the analysis of Head-Driven Phrase Structure Grammar is more similar to that of GB theory than to the object-raising type in that it doesn't assume the syntactic connectivity between the subject in the matrix clause and the gap in the infinitival phrase. Thus, Pollard & Sag (1994) analyze the TC as a lexical fact about some special predicates and assume that such predicates as *easy*, *difficult*, *take*, and *cost* subcategorize for infinitive complements containing an accusative NP gap which is coindexed with the subject.

Even though the second type of approaches has long been more favored by current syntactic frameworks, it is not clear whether there is sufficient empirical evidence to support this more dominant, second type of analysis, especially the GB version of this analysis (Jones 1983).² Since synchronic linguistics doesn't seem to be able to resolve this controversy one way or the other, what then does the diachrony of the relevant parts of English grammar say about the analysis of the TC? Does diachrony argue for any particular position?

¹ OE (ME, MnE) = Old English (Middle English, Modern English), P-Stranding = prepositional stranding, TC = *tough*-construction, PO = prepositional object, OPO = occurrence of an overt PO in a non-canonical position (i.e. outside PP).

² In contrast to earlier analyses in which the matrix subject NP is related directly to the gap in the complement clause by means of a *Tough*-Movement or *Tough*-Deletion transformation (cf. Berman (1973, 1974), Bresnan (1971), Chomsky (1973), Lasnik & Fiengo (1974), Postal & Ross (1971)), this analysis relates the two positions indirectly by means of two distinct rules: *Wh*-Movement and a Rule of Predication. Jones (1983) convincingly argues that there is no empirical evidence to support the hypothesis that *Wh*-Movement is involved in the derivation of *tough*-constructions. In particular, he argues that although the constraints (the Specified Subject Condition, the Tensed S Condition, and the Subadjacency Condition) proposed by Chomsky (1973, 1976) have been modified in various ways in subsequent work, the empirical validity of these constraints has been largely taken for granted in spite of the apparent counterevidence provided by *tough*-constructions.

2. PREPOSITIONAL STRANDING IN ENGLISH AND ITS CHANGE

2.1. PREPOSITIONAL STRANDING IN MODERN ENGLISH

A preposition in MnE is normally followed by its complement but this does not occur in some cases, either because the complement must occupy the initial position in the clause or because it is absent. Thus, prepositional stranding (P-Stranding), the phenomenon in which a (deferred) preposition is not followed by its object, is possible in many MnE constructions including *wh*-questions, relative clauses, the prepositional passive, tough-constructions, complement object deletion, comparative constructions, topicalization, exclamations, as in (1) to (8):

(1) *Wh*-Questions

- (a) (i) *On* what did they base their predictions?
(ii) What did they base their predictions *on*?
- (b) (i) I asked him *in* which garage he parked my car.
(ii) I asked him which garage he parked my car *in*.

(2) Relative Clauses

- (a) (i) The old house *about* which I was telling you is empty.
(ii) The old house which I was telling you *about* is empty.
- (b) (i) This is the man *to* whom we sold our house.
(ii) This is the man whom we sold our house *to*.
- (c) (i) *The building *beside* that you're standing was designed by my grandfather.
(ii) The building that you're standing *beside* was designed by my grandfather.
- (d) (i) *There are many other places *in* the same kind of animals live.
(ii) There are many other places the same kind of animals live *in*.
- (e) (i) *They ate *for* what(ever) they paid.
(ii) They ate what(ever) they paid *for*.
- (f) (i) This is a good instrument *with* which to measure vibration.
(ii) This is a good instrument (*which) to measure vibration *with*.

(3) Comparative Constructions

- (a) This is the same sort of house as I live *in*.
- (b) He owns more houses than I have ever lived *in*.

(4) Prepositional Passive

- (a) A financial controller thoroughly looked *into* the city's accounts.
- (b) The city's accounts were thoroughly looked *into* (by a financial controller).
- (c) **Into* the city's accounts were thoroughly looked (by a financial controller).

(5) Tough-Construction

- (a) (i) To deal *with* Bill is easy/hard/difficult/impossible.
(ii) It is easy/hard/difficult/impossible to deal *with* Bill.
(iii) Bill is easy/hard/difficult/impossible to deal *with*.
- (b) (i) It is not worth listening *to* his advice.
(ii) His advice is not worth listening *to*.

(6) Complement Object Deletion

- (a) This paper is terribly flimsy to write *on*.
- (b) *To write *on* this paper is terribly flimsy.
- (c) *It is terribly flimsy to write *on* this paper.

(7) Topicalization

- (a) *In* the palace I could never live.
- (b) The palace I could never live *in*.

(8) Exclamations

- (a) What a wonderful house you live *in*!
- (b) What a mess you've got *into*!

On the other hand, P-Stranding, which is now possible also in the TC, was not allowed in all the corresponding OE prepositional constructions. OE shows an extremely rigid contrast between two groups of prepositional constructions with regard to P-Stranding possibilities. Above all, P-Stranding was allowed and was obligatory in the following six prepositional constructions in OE: *þe*-relative clauses, as in (9a), zero relative clauses, as in (9b), free relative clauses introduced by *swa hw-* *swa* 'whatever, whoever', as in (9c), infinitival relatives, as in (9d), complement object deletion construction, as in (9e), and comparative construction, as in (9f):

- (9) (a) ... nyhst þæm tune ðe se deaða man *on* lið
 ... next that homestead that the dead man in lies
 '... next to the homestead that the dead man lies in' (Or 20.33)
- (b) ðonne is oþer stow elreorde men beoð *on*
 then is other place barbarous men are in
 'then, there is (an)other place barbarous men live in' (Marv 18.1)
- (c) and se þe rapust com on þone mere æfter þæs wæteres styring
 and he that quickest came into the lake after the water's stirring
 wearð gehæled fram swa hwilcere untrummysse swa he *on* wæs;
 was healed from so which infirmity [dat] as he in was
 'and he who came most quickly into the lake after the stirring of the water was
 healed from whatever infirmity he was in' (Jn 5.4)
- (d) ðeah he nu nanwuht elles næbbe ymbe to sorgienne
 though he now nothing else not-have about to worry
 'though he now has nothing else to worry about' (Bo 24.15)
- (e) heo wæs swiþe fæger an to locianne;
 it was very beautiful at to look
 'it was very beautiful to look at' (Or 74.12-3)
- (f) ... ne geortriewe ic na Gode þæt he us ne mæge
 ... not distrust I never God that he us not can
 gescildan to beteran tidun þonne we nu *on* sint.
 shield for better times than we now in are
 'I never doubt that God can protect us for better times than we are now in'
 (Or 86.4-5)

Note that none of these attested P-Stranding types in OE involve the displacement of a prepositional object (PO) from the PP and the 'occurrence of the overt PO in a non-canonical position' (OPO, i.e., ... NP_i ... [pp P t_i] ...). That is, the overt NP which should be the PO of the deferred P is missing in every case of OE P-Stranding.

One might want to argue that the OE relativizer *þæ* in (9a) is the PO. However, there is no evidence that OE 'relativizer' *þæ* is the PO of the deferred P. Above all, it was indeclinable, whereas virtually every pronoun and noun in OE was declinable. Second, it was mainly used as a subordinating conjunction (in other places), but not as a pronoun. Thus, the status of OE 'relativizer' *þæ* was clear, unlike its later English counterpart *that*, which is similar to the demonstrative pronoun *that* in form but it still analyzed as a complementizer rather than a relative pronoun in many theoretical frameworks. Furthermore, there are some periods in which the 'relativizer' *that* could be used together with a relative pronoun, as in (10):

(10) ... the Minotaur, *which that* he slough in Crete.

'... the Minotaur, which he had slain in Crete'

(Chaucer, Knight Tale 122)

Except for the above six cases, no other type of P-Stranding is attested in OE. In particular, none of the Modern English P-Stranding types involving the OPO (i.e. *wh*-questions, *who*- or *which*-relatives, topicalization, exclamations, and the prepositional passive) were possible. Therefore, the alternative co-occurrence of P and its PO within the same PP which could avoid the OPO through pied piping or impersonal constructions, was obligatory if it was not prohibited otherwise in OE. Thus, pied piping, as the only possible alternative in *wh*-questions, as in (11), *se þe*- or *se*-relative clauses, as in (12a) and (12b), and topicalization, as in (13), had to occur, whereas both the prepositional passive and exclamations involving pied piping were not allowed as in MnE.

(11) (a) *To hwæm locige ic butan to ðæm eaðmodum?*
to whom look I but to the humble

'to whom shall I look but to the humble?'

(CP 299.19-20)

(b) *Ic nat ful geare ymb hwæt þu giet tweost*
I not-know full entirely about what you still doubt

'I do not fully understand what you still doubt about'

(Bo 12.26)

(12) (a) *Eala þu wundorlice rod, on þære þe crist wolde þrowian.*
hail thou wonderful cross on which that Christ would suffer

'hail, you wonderful cross, on which (that) Christ deigned to suffer'

(ÆIS ii. 27.115)

(b) *gehyr þu arfæsta God mine stefne, mid þære ic earm to þe cleopie;*
hear thou merciful God my voice with which I poor to thee cry

'hear you, merciful God, my voice, with which I, poor one, cry to you'

(BIHom 89.13-4)

(13) (a) *On þisne enne god we sceolon geleafan*
in this one God we must believe

(ÆIS i. 1.40)

'in this one god, we must believe'

- (b) *For ðæs lichaman life, þe langsum beon ne mæg, swincað menn swide,*
 for the body's life, that long be not may, toil men greatly
 'for the life of the body, that cannot last eternally, men toil greatly'
 (ÆHom 6.145-6)

In short, no attested types of P-Stranding in OE involve the OPO. In addition, none of the MnE types of P-Stranding involving the OPO are attested in OE and, at the same time, their alternative constructions, which could avoid the OPO through pied piping or impersonal construction with or without a dummy subject, are well attested. All this strongly suggests that the OPO was strictly prohibited in OE. This situation in which the OPO was not allowed in OE can be taken, roughly, as an OE constraint against the OPO, as in (14).³

- (14) *OPO = *... NP_i ... [PP P t_i] ...

3. TOUGH-CONSTRUCTION IN OLD ENGLISH

One corollary of this observation is that if a construction required the P-Stranding involving the OPO, it would not be allowed in OE, even if it were otherwise possible. One piece of positive evidence which demonstrates this corollary comes from the so-called *tough-construction* (TC) in OE. Although OE has many examples of the TC, as in (15), no such examples involve P-Stranding and thus no examples of the TC with P-Stranding are attested in OE. Thus, such *tough*-sentences as **Mary is hard to talk with* was ungrammatical in OE (Allen 1980, Wurff 1992).

- (15) (a) *se deaða byð uneape ælcon men on neaweste to hæbbenne*
 the dead is difficult for each man in neighborhood to have
 'the dead man is difficult for everyone to have near by' (BIHom 59.14-5)
- (b) *þæt him wære eadelic se wifired to healdanne & to rihtanne*
 that him was easy the nunnery to hold and to rule
 'that the nunnery was easy for him to lead and rule' (GD I. 27.4)

Since the TC without P-Stranding was possible *and* P-Stranding was allowed unless it violated the constraint against the OPO, the absence of the TC involving P-Stranding can be best explained under the assumption that the P-Stranding in the TC would have had to involve the prohibited OPO. This is supported by the fact that alternative, impersonal constructions with or without a dummy subject, which do not violate the constraint against the OPO, are well-attested in OE, as in (16):

- (16) (a) *hit bið swiðe unieðe ægðer to donne, ge wið ðone to cidanne*
 it is very difficult both to take and against him to contend
 ðe yfel deð, ge eac sibbe wið to habbenne.
 who evil does, and also peace with to have
 'it is very difficult to both, to contend against him and to preserve peace with him'
 (CP 355.21-2)

³ A similar constraint has been suggested in many studies (van Riemsdijk 1978, Allen 1980, Hornstein & Weinberg 1981, Kayne 1981a,b, Lightfoot 1981, Bennis & Hoekstra 1984, among others). However, most of them put their emphasis on the analysis of the constraint mainly from a theoretical point of view, thereby ignoring why OE had such a constraint and what made the constraint change in ME, aspects which are indispensable for a complete account of the changes in Stranding.

(b) Eapere ys olfende to farenne þurh nædle pyrel,
 easier is for a camel to go through needle's eye
 þonne se rica and se welega on godes rice ga;
 than the ruler and the rich in God's kingdom go

'(it) is easier for a camel to go through a needle's eye than
 for the ruler and the rich man and to enter the kingdom of God' (Mk 10.25)

Finally, another piece of evidence which supports such an assumption about the absence of P-Stranding in the TC is found in the changes of P-Stranding constructions in the history of English. That is, all the MnE types of P-Stranding involving the OPO which were previously prohibited because of the constraint against the OPO in OE began to develop in ME, only with a little difference in their chronology, and the TC with P-Stranding also began to appear in ME, along with these new types of P-Stranding.

My arguments so far are as follows. First, although the type of approach which assumes the subcategorization of a gap in the object position is favored, it is not clear whether such a claim has sufficient supporting empirical evidence. Second, P-Stranding was possible in OE but none of them involved the OPO (i.e. occurrence of an overt PO outside PP or movement of an overt prepositional object out of PP), whereas none of the MnE types of P-Stranding which clearly involve the OPO were not allowed in OE. Third, the TCs are well attested in OE but no such examples show P-Stranding, although the alternative constructions to the unattested types of the TCs with P-Stranding are well attested. Fourth, the TCs with P-Stranding began to develop, along with the other types of P-Stranding constructions which were not allowed due to the constraint against the OPO in OE. Finally, all this means that the P-Stranding in the TC would have had to involve the OPO.

4. CONCLUSION

In conclusion, the absence of the TC involving P-Stranding in OE and its development in Middle English, along with other types of P-Stranding which were formerly prohibited due to the constraint against the OPO argues, against the currently dominant GB-type analysis, thereby suggesting the need of a different approach to the TC which can not only accommodate the insights from the diachronically more justifiable raising-type analysis but also resolve problems found in previous proposals along that line.

OLD ENGLISH TEXTS: SHORT TITLES AND REFERENCES ⁴

[*: Quoted by line; **: Quoted by page and line]

ÆHom = POPE, J. C. (ed.) (1967-8). The Homilies of Ælfric: a Supplementary Collection. EETS 259, 260. [homily no., line]

ÆLS = SKEAT, W. (ed.) (1881-1900). Ælfric's Lives of Saints. EETS 76, 82, 94, 114. [volume, life, line]

BlHom = MORRIS, R. (ed.) (1874, 1876, 1880). The Blickling Homilies. EETS 57, 63, 73.**

Bo = SEDGEFIELD, W. J. (ed.) (1899). King Alfred's Old English Version of Boethius' de Consolatione Philosophiae. Oxford: Clarendon.**

⁴ For identification of the OE texts and examples, I follow the system of Venezky and Healey (1980).

CP = SWEET, H. (ed.) (1871). King Alfred's West-Saxon Version of Gregory's Pastoral Care. EETS 45, 50.**

EETS = Early English Text Society.

GD = HECHT, H. (ed.) (1900-7). Bischof Waerferths von Worcester Übersetzung der Dialoge Gregors des Grossen, 2 vols. Leipzig: Wigand (vol. I) / Hamburg: Henri Grand (vol. II).**

Jn = John. In LIUZZA, R. M. (ed.) (1994). The Old English Version of the Gospels. EETS 304. [Quoted by chapter and verse]

Marv = RYPINS, S. (ed.) (1924). Wonders of the East in Three Old English Prose Texts. EETS 161.**

Mk = Mark. In LIUZZA, R. M. (ed.) (1994). The Old English Version of the Gospels. EETS 304. [Quoted by chapter and verse]

Or = SWEET, H. (ed.) (1883). King Alfred's Orosius. EETS 79.**

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